

### AMENDMENTS TO THE CLAIMS

This Listing of Claims will replace all prior versions and listings of claims in the application.

#### Listing of Claims

1-2 (Canceled).

3. (Currently amended) The isolated human antibody or antigen-binding portion thereof according to claim 103 or claim 104~~1 or claim 2~~, wherein the antibody or antigen-binding portion thereof possesses one or more properties selected from the group consisting of:

- a) ~~opsonizes~~~~opsonic~~ for *Pseudomonas aeruginosa* strain It-2cells;
- b) ~~promotes~~ facilitates phagocytosis of ~~said~~ *Pseudomonas aeruginosa* strain It-2cells;
- c) enhances the immune response to *Pseudomonas aeruginosa* strain It-2cells;
- d) facilitates the killing of *Pseudomonas aeruginosa* strain It-2cells; and
- e) inhibits *Pseudomonas aeruginosa* strain It-2 infection.

4-9 (Canceled).

10. (Currently amended) The isolated human antibody or antigen-binding portion thereof according to ~~claim 1 or claim 103 or claim 104~~claim 2, wherein said antibody or antigen-binding portion thereof binds to *Pseudomonas aeruginosa* the LPS O-specific side chain of *Pseudomonas aeruginosa* strain It-2 with a  $K_d$  selected from the group consisting of:

- a)  $5 \times 10^{-7}$  M to  $1 \times 10^{-7}$  M;
- b)  $1 \times 10^{-7}$  to  $5 \times 10^{-8}$  M;~~37~~and
- c)  $5 \times 10^{-8}$  M to  $1 \times 10^{-8}$  M;and
- d)  $1 \times 10^{-8}$  M to  $1 \times 10^{-11}$  M.

11-12 (Canceled).

13. (Currently amended) The isolated human antibody or antigen-binding portion thereof according to claim 103 or claim 104~~or claim 2~~, wherein said antibody or antigen-binding portion thereof has ~~a half-life~~ an *in vivo* half life of between one hour and thirty days.

14-15 (Canceled).

16. (Currently amended) The isolated human antibody or antigen-binding portion thereof according to claim 103 or claim 104~~or claim 2~~, wherein said antibody is an isotype ~~is an isotype~~ ~~[[is]]~~ selected from the group consisting of: ~~immunoglobulin G (IgG[[ ]]), IgM, IgE, IgA and IgD.~~

17. (Currently amended) The isolated human antibody or antigen-binding portion thereof according to claim 16, wherein said IgG is a subtype selected from the list consisting of IgG1, IgG2, IgG3 and IgG4.

18. (Currently amended) The isolated human antibody or antigen-binding portion thereof according to claim 17, wherein said ~~IgG antibody is an IgG2 antibody~~ the IgG2 subtype.

19. (Currently amended) The isolated human antibody or antigen-binding portion thereof according to claim 103 or claim 104~~or claim 2~~, wherein said antibody or portion thereof is labeled.

20. (Previously presented) The isolated human antibody or antigen-binding portion thereof according to claim 19, wherein said label is selected from the group consisting of: a radiolabel, an enzyme label, a fluorescent label, a toxin, a magnetic agent, a second antibody, an affinity label, an epitope tag, an antibiotic, a complement protein and a cytokine.

21. (Currently amended) The isolated human antibody or antigen-binding portion thereof according to claim 103 or claim 104~~or claim 2~~, wherein said antibody or portion thereof comprises ~~comprising~~ a light chain selected from the group consisting of:

- a) a kappa light chain; and
- b) a lambda light chain.

22. (Currently amended) The isolated human antibody or antigen-binding portion thereof according to claim 21, wherein said kappa light chain utilizes a human gene segments selected from the group consisting of: V $\kappa$ 2/A19/A3 and J $\kappa$ 1; V $\kappa$ 1/A30; V $\kappa$ 4/B3; V $\kappa$ 3/A27; V $\kappa$ 3/L2; V $\kappa$ 1/A30; V $\kappa$ 3/L2; L16; and V $\kappa$ 1/A30.

23-25 (Canceled).

26. (Currently amended) The isolated human antibody or antigen-binding portion thereof according to claim 21, wherein said kappa light chain comprises an amino acid sequence according to ~~selected from the group consisting of:~~ SEQ ID NO: 22; SEQ ID NO: 23; SEQ ID NO: 24; SEQ ID NO: 25; SEQ ID NO: 26; SEQ ID NO: 27; SEQ ID NO: 28; SEQ ID NO: 29; and SEQ ID NO: 30.

27-29 (Canceled).

30. (Currently amended) The isolated human antibody or antigen-binding portion thereof according to claim 103 or claim 104 ~~or claim 2~~ comprising a heavy chain, wherein the heavy chain utilizes a human gene segments selected from the group consisting of: V $\mu$ 3/V4-04 and J $\mu$ 4; V $\mu$ 3/V4-59; V $\mu$ 3/V3-33; V $\mu$ 3/V3-15; V $\mu$ 6/V6-01; and V $\mu$ 5/V5-51.

31-35 (Canceled).

36. (Currently amended) The isolated human antibody or antigen-binding portion thereof according to claim 103 or claim 104 ~~or claim 2~~, comprising a heavy chain that comprises an amino acid sequence according to ~~selected from the group consisting of:~~ SEQ ID NO: 13; SEQ ID NO: 14; SEQ ID NO: 15; SEQ ID NO: 16; SEQ ID NO: 17; SEQ ID NO: 18; SEQ ID NO: 19; SEQ ID NO: 20; and SEQ ID NO: 21.

37. (Canceled).

38. (Currently amended) The antigen-binding portion according to claim 103 or claim 104~~or claim 2~~ selected from the group consisting of: an Fab fragment, an F(ab')<sub>2</sub> fragment and an Fv fragment.

39. (Currently amended) The isolated human antibody or antigen-binding portion thereof according to claim 103 or claim 104~~or claim 2~~, wherein said antibody is a single chain antibody.

40. (Currently amended) The isolated human antibody or antigen-binding portion thereof according to claim 103 or claim 104~~or claim 2~~, wherein said antibody is a chimeric antibody.

41. (Original) The chimeric antibody according to claim 40, comprising framework regions and CDR regions from different human antibodies.

42-43 (Canceled).

44. (Currently amended) The isolated human antibody or antigen-binding portion thereof according to claim 103 or claim 104~~or claim 2~~, wherein said antibody or portion thereof is derivatized.

45. (Currently amended) The isolated human antibody or antigen-binding portion thereof according to claim 44, wherein said antibody or portion thereof is derivatized with polyethylene glycol, at least one methyl or ethyl group, or at least one carbohydrate moiety.

46. (Currently amended) A pharmaceutical composition comprising the antibody or antigen-binding portion thereof according to claim 103 or claim 104~~or claim 2~~ and a pharmaceutically acceptable carrier.

47. (Currently amended) A kit comprising the antibody or antigen-binding portion thereof according to claim 103 or claim 104~~or claim 2~~, a pharmaceutically acceptable carrier therefor, and a container.

48. (Canceled).

49. (Currently amended, Withdrawn) A method for treating or preventing infection with *Pseudomonas aeruginosa* strain It-2 ~~infection~~, comprising the step of administering the pharmaceutical composition according to claim 46 ~~an isolated human antibody according to claim 1 or claim 2~~ to a patient at risk of being infected with, or currently infected with, said ~~said~~ *Pseudomonas aeruginosa*.

50-52 (Canceled).

53. (Currently amended, Withdrawn) The method according to claim 49, wherein said antibody or antibody-binding portion thereof is labeled with a radiolabel, a toxin, a complement protein, a cytokine or an antibiotic.

54. (Canceled).

55. (Withdrawn) The method according to claim 49 wherein said patient is a burn patient, a surgical patient, a prosthesis recipient, a respiratory patient, a cancer patient, a cystic fibrosis patient or an immunocompromised patient.

56. (Withdrawn) The method according to claim 49, wherein said pharmaceutical composition further comprises toxins, complement proteins, radiolabeled proteins, cytokines, antibiotics, or any combination thereof.

57. (Currently amended) An isolated cell line that produces an ~~the~~ antibody according to claim 103 or 104 ~~or claim 2~~.

58. (Currently amended) The cell line according to claim 57, wherein said cell line is a hybridoma.

59. (Currently amended) A method of producing an isolated human antibody or antigen-binding portion thereof that specifically binds to the LPS O-specific side chain ~~from one~~ of *Pseudomonas aeruginosa* strains ~~Fisher Devlin (International Serogroups)~~ It-2 (011), It-3 (02), It-4 (01), It-5 (010), It-6 (07), PA01 (05), 170003 (02), IATS016 (02/05), and 170006 (02), comprising:

- a) culturing a non-human cell capable of producing said antibody under conditions in which the antibody is produced;
- b) isolating said antibody from said cell culture.

60-63 (Canceled).

64. (Currently amended, Withdrawn) A method for making an isolated human antibody that specifically binds to the LPS O-specific side chain ~~from one~~ of *Pseudomonas aeruginosa* strains ~~Fisher Devlin (International Serogroups)~~ It-2 (011), It-3 (02), It-4 (01), It-5 (010), It-6 (07), IATS016 (02/05), and 170006 (02), comprising:

- a) immunizing a non-human animal capable of producing a human antibody therein with a *Pseudomonas aeruginosa* strain It-2 antigenic composition;
- b) allowing said non-human animal to mount a humoral response to said antigenic composition; and
- c) recovering said human antibody from said non-human animal.

65-76 (Canceled)

77. (Previously presented) An host cell comprising

- a) a nucleic acid molecule according to any one of claims 65, 67 or 73; or
- b) a vector according to claim 75 or 76.

78-96 (Canceled).

97. (Currently amended) The isolated human antibody or antigen-binding portion thereof according to claim 103 or claims 1041 or claim 2, wherein the antibody or portion thereof is produced by a process comprising the steps of:

- a) immunizing a non-human animal capable of producing a human antibody with an antigen selected from the group consisting of: an isolated preparation of the LPS O-specific side chain of *Pseudomonas aeruginosa* strain It-2 ~~LPS preparation~~, a virulent *Pseudomonas aeruginosa* strain It-2 cell preparation, an attenuated *Pseudomonas aeruginosa* strain It-2 cell preparation, and a killed *Pseudomonas aeruginosa* strain It-2 cell preparation;
  - b) allowing said non-human animal to mount an immune response to said antigen;
- and
- c) recovering said antibody from said non-human animal.

98-102 (Canceled).

103. (Currently amended) An isolated human antibody or an antigen-binding portion thereof, that specifically binds lipopolysaccharide (LPS) O-specific side chain ~~from one of *Pseudomonas aeruginosa* strains Fisher-Devlin (International Serogroups) It-2 (011), It-3 (02), It-4 (01), It-5 (010), It-6 (07), PA01 (05), 170003 (02), IATS016 (02/05), and 170006 (02).~~

104. (Currently amended) The antibody or antigen-binding portion thereof according to claim 103, ~~which~~ wherein said antibody or portion thereof is monoclonal.

105. (Currently amended) The antibody or antigen-binding portion thereof according to claim 103 or 104, having a relative binding avidity of about 1.0.

106 (Canceled).

107. (Currently amended) A passive vaccine for preventing or inhibiting *Pseudomonas aeruginosa* infection comprising ~~one or more human monoclonal antibodies or an antigen-binding portion thereof, selected from the group consisting of~~

- a) the antibody or portion thereof according to claim ~~1 or 102 or~~ 103 or 104; and

b) at least one additional antibody or an antigen-binding portion thereof which binds a *Pseudomonas aeruginosa* strain other than It-2.

108 (Canceled).

109. (Currently amended, Withdrawn) A method for detecting the presence of *Pseudomonas aeruginosa* strain It-2 in a biological sample comprising the steps of contacting said sample with an antibody or antigen-binding portion thereof according to ~~any one of claims 1 or 102 or claim~~ 103 or 104.

110. (New) A pharmaceutical composition comprising:

- a) an isolated human antibody or an antigen-binding portion thereof that specifically binds the lipopolysaccharide (LPS) O-specific side chain of *Pseudomonas aeruginosa* strain It-2;
- b) at least one additional antibody or an antigen-binding portion thereof which binds a *Pseudomonas aeruginosa* strain other than It-2; and
- c) a pharmaceutically acceptable carrier.

111. (New) The isolated human antibodies or antigen-binding portions thereof of claim 110, wherein said antibodies or portions thereof are monoclonal.

112. (New) The pharmaceutical composition of claim 110 or 111, wherein said composition further comprises toxins, complement proteins, radiolabeled proteins, cytokines, antibiotics, or any combination thereof.

113. (New) The isolated human antibody or antigen-binding portion thereof according to claim 103 or claim 104, wherein said antibody or portion thereof comprises:

- a) a heavy chain, wherein said heavy chain comprises the CDR1, CDR2 and CDR3 regions of SEQ ID NO: 22;
- b) a kappa light chain, wherein said kappa light chain comprises the CDR1, CDR2 and CDR3 regions of SEQ ID NO: 13; or
- c) both a) and b).



114. (New) The isolated human antibody or antigen-binding portion thereof according to claim 103 or claim 104, wherein said antibody or portion thereof comprises:

a) a heavy chain, wherein said heavy chain comprises the amino acid sequence of SEQ ID NO: 22;

b) a kappa light chain, wherein said kappa light chain comprises the amino acid sequence of SEQ ID NO: 13; or

c) both a) and b).

115. (New) The isolated human antibody or antigen-binding portion thereof according to claim 103 or claim 104, wherein said antibody or portion thereof comprises:

a) a heavy chain, wherein said heavy chain is encoded by a nucleic acid which encodes an amino acid sequence comprising SEQ ID NO: 22;

b) a kappa light chain, wherein said kappa light chain is encoded by a nucleic acid which encodes an amino acid sequence comprising SEQ ID NO: 13; or

c) both a) and b).

116. (New) The pharmaceutical composition of claim 46, wherein said composition further comprises toxins, complement proteins, radiolabeled proteins, cytokines, antibiotics, or any combination thereof.